| | | | Page | 7 01 7 |
|---|---------------|--|--------------------------|--------|
| Farm PTO-1449 (modified) WAR 0 5 20st of Patents and Publications fo | r Applicant's | Atty. Docket No. 10831.0027.000000 Applicant | Serial No. 09/678,041 | |
| DEPPLEMENTAL INFORMATION STATEMENT | DISCLOSURE | Gary E. Horst | | |
| (Use several sheets if neces | sary) | Filing Date: October 3, 2000 | Group: 2834 | |
| U.S. Patent Documents | , - | atent Documents | Other Art | |

U.S. Patent Documents (do NOT delete this heading)

U.S. Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Name | Class | Sub Class | Filing Date of App. |
|----------------|--------------|--------------------|---------------------------|--------|-------|--------------|---------------------|
| MA | Al | 5,844,343 | 12/01/98 | Horst | 310 | 184 | 12-17-96 |
| 012 | A2 | 5,801,463 | 01/ 0 9/9 8 | Yozura | 310 | 51 | 06-17-97 |

Foreign Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Country | Class | Sub Class | Translation Yes/No |
|----------------|--------------|--------------------|------|---------|-------|--------------|-----------------------|
| | B1 | | | | | | |

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation |
|----------------|--------------|--|
| MA | Cl | International Search Report for PCT/US01/30441 |
| N/2 | C2 | D. E. Cameron et al., "The Origin and Reduction of Acoustic Noise in Doubly Salient Variable-Reluctance Motors," November/December 1992, IEEE Transactions on Industry Applications, Vol. 28 No. 6, pp. 1250-1255. |
| MA | C3 | Patent Abstracts of Japan Vol. 1999, No. 12, 29 Oct. 1999 and JP 11 178298 A (Toshiba Corp), 2 July 1999 abstract, Figure 8. |

| Examiner: | Gy. Herma | PERZ | Date Considered: | 7/15/ | 03 |
|-----------------------------------|--|------------------------------------|---|--------------------|------------------------------|
| EXAMINER: initi in conformance | is) if reference considered and not considered. Include | whether or no le copy of this t | t citation is in conformance with MPEP form with next communication to applic | 609; Draw cant. | line through citation if not |

Form PTO-1449 (modified

Atty. Docket No. 10831.0027.000000 Serial No.

09/678,041

List of Patents and Publications for Applicant's

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Applicant: Gary E. Horst

Title: Reduced Noise Dynamoelectric Machine

Filing Date:

Group:

U.S. Patent Documents

October 3, 2000
Foreign Patent Documents

Other And

See Page 1

See Page 4

See Page

U.S. Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Name | Class | Sub Class | Filing Date of App. |
|----------------|--------------|--------------------|------------|------------------|-------|--------------|---------------------|
| 19/2 | Al | RE 34,609 | 05/17/94 | Mueller | 318 | 254 | 06/22/87 |
| | A2 | RE 36,568 | 02/15/2000 | Horst | 318 | 701 | 12-29-93 |
| | A3 | 747,698 | 12/22/03 | Geisenhoner | N/A | N/A | 8/28/01 |
| | A4 | 4,164,696 | 08/14/79 | Kastilahn et al. | 318 | 696 | 08/10/77 |
| | A5 | 4,213,070 | 7/15/80 | Lund et al. | 310 | 71 | 8/10/78 |
| | A6 | 4,249,116 | 2/3/81 | Hieda | 318 | 254 | 3/23/79 |
| | A7 | 4,253,053 | 2/24/81 | Ray et al. | 318 | 701 | 3/28/78 |
| | A8 | 4,427,910 | 1/24/84 | Richter et al. | 310 | 214 | 3/1/82 |
| | A9 | 4,447,771 | 5/8/84 | Whited | 318 | 661 | 8/31/81 |
| | A10 | 4,488,101 | 12/11/84 | Studtmann | 318 | 800 | 12/23/82 |
| | All | 4,500,824 | 02/19/85 | Miller | 318 | 701 | 05/21/84 |
| | A12 | 4,520,302 | 5/28/85 | Hill et al. | 318 | 696 | 3/12/84 |
| | A13 | 4,563,619 | 1/7/86 | Davis et al. | 318 | 138 | 4/6/83 |
| 7 | Al4 | 4,661,756 | 4/28/87 | Murphy et al. | 318 | 701 | 10/18/85 |
| | A15 | 4,670,696 | 6/2/87 | Byrne et al. | 318 | 701 | 10/18/85 |
| | A16 | 4,672,253 | 06-09-87 | Tajimal et al. | 310 | 269 | 07-25-85 |
| | A17 | 4,691,038 | 10/2/90 | MacMinn | 318 | 696 | 10/16/89 |
| | A18 | 4,712,050 | 12/8/87 | Nagasawa et al. | 318 | 254 | 1/30/87 |
| | A19 | 4,731,570 | 3/15/88 | Lee | 318 | 696 | 9/8/86 |
| W | A20 | 4,761,580 | 8/2/88 | Hein et al. | 310 | 214 | 6/17/87 |
| Ms | A21 | 4,849,873 | 7/18/89 | Vanderhelst | 363 | 55 | 11/05/87 |

| Examiner: Guillermo Perez DATE Considered: 7/1 | 15/ | 03 |
|--|-----|----|
|--|-----|----|

Form PTO-1449 (modified)

JUN 1 2 2002

Atty. Docket No. 10831.0027.000000 Serial No.

09/678,041

List of Patents and Publications for Applicant's

SUPPLEMENTAL INFORMATION DISCLOSURE **STATEMENT**

(Use several sheets if necessary)

Title: Reduced Noise Dynamoelectric Machine

Filing Date:

Applicant: Gary E. Horst

Group:

October 3, 2000

2834

U.S. Patent Documents

Foreign Patent Documents

Other Art

See Page 1

See Page 4

See Page 4

U.S. Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Name | Class | Sub Class | Filing Date of App. |
|----------------|--------------|--------------------|----------|-----------------|-------|--------------|---------------------|
| N) | A22 | 4,859,921 | 8/22/89 | Archer | 318 | 599 | 3/10/88 |
| 1 | A23 | 4,868,477 | 9/19/89 | Anderson et al. | 318 | 696 | 6/23/87 |
| | A24 | 4,933,584 | 07-12-90 | Harms et al. | 310 | 162 | 12-22-88 |
| | A25 | 4,933,621 | 6/12/90 | MacMinn et al. | 318 | 696 | 5/12/89 |
| | A26 | 4,943,760 | 7/24/90 | Byrne et al. | 318 | 701 | 11/2/88 |
| | A27 | 4,961,038 | 10/02/90 | MacMinn | 318 | 696 | 10/16/89 |
| | A28 | 5,072,166 | 12/10/91 | Ehsani | 318 | 696 | 6/18/90 |
| | A29 | 5,075,610 | 12/24/91 | Harris | 318 | 701 | 3/28/91 |
| | A30 | 5,119,000 | 6/2/92 | Schultz et al. | 318 | 254 | 2/25/91 |
| | A31 | 5,122,697 | 06-16-92 | Horst | 310 | 181 | 04-30-90 |
| | A32 | 5,124,607 | 6/23/92 | Rieber et al. | 310 | 214 | 5/19/89 |
| | A33 | 5,140,207 | 8/18/92 | Baumeister | 310 | 83 | 12/13/89 |
| | A34 | 5,144,209 | 9/1/92 | Ingji, et al. | 318 | 254 | 6/28/91 |
| T | A35 | 5,175,458 | 12/29/92 | Lemmer et al. | 310 | 71 | 9/4/91 |
| 1 | A36 | 5,196,775 | 3/23/93 | Harris et al. | 318 | 638 | 2/20/91 |
| 1 | A37 | 5,239,217 | 08-24-93 | Horst | 310 | 51 | 05-18-92 |
| 1 | A38 | 5,239,220 | 8/24/93 | Taji et al. | 310 | 214 | 8/22/92 |
| | A39 | 5,250,867 | 10-05-93 | Gizaw | 310 | 179 | 11-28-9 |
| | A40 | 5,270,603 | 12/14/93 | Narumi | 310 | 260 | 4/23/92 — |
| V | A41 | 5,294,856 | 03-15-94 | Horst | 310 | 181 | 08-12-91 |
| MD | A42 | 5,296,785 | 3/22/94 | Miller | 318 | 254 | 8/2003 |

EXAMINER: DATE CONSIDERED:

Form PTO-1449 (modified List of Patents and Publications for Applicant's

Atty. Docket No. 10831.0027.000000 Serial No.

09/678,041

Applicant: Gary E. Horst

SUPPLEMENTAL INFORMATION DISCLOSURE **STATEMENT**

Title: Reduced Noise Dynamoelectric Machine

Filing Date:

Group:

(Use several sheets if necessary)

October 3, 2000

2834

U.S. Patent Documents See Page 1

Foreign Patent Documents

Other Art

See Page 4 See Page 4

U.S. Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Name | Class | Sub Class | Filing Date of App. |
|----------------|--------------|--------------------|------------|-------------------|-------|--------------|---------------------|
| MI | A43 | 5,306,976 | 04-26-94 | Beckman | 310 | 215 | 01-29-93 |
| | A44 | 5,343,105 | 8/30/94 | Sakabe et al. | 310 | 179 | 1/29/93 |
| | A45 | 5,373,206 | 12/13/94 | Lim | 310 | 68 | 2/17/93 |
| | A46 | 5,386,162 | 01-31-95 | Horst | 310 | 51 | 04-06-93 |
| | A47 | 5,446,359 | 08-29-95 | Horst | 318 | 701 | 12-29-93 |
| | A48 | 5,461,295 | 10-24-95 | Horst | 318 | 701 | 01-28-94 |
| | A49 | 5,479,080 | 12/26/95 | Jones et al. | 318 | 701 | 7/23/93 |
| | A50 | 5,487,213 | 1/30/96 | Hult et al. | 29 | 556 | 5/2/94 |
| | A51 | 5,563,488 | 10/8/96 | Stephenson et al. | 318 | 701 | 6/7/95 |
| | A52 | 5,589,752 | 12/31/96 | lwasaki et al. | 318 | 701 | 04/25/95 |
| | A53 | 5,604,388 | 02-18-97 | Baker et. al. | 310 | 51 | 02-16-94 |
| | A54 | 5,701,064 | 12-23-97 | Horst et. al. | 318 | 701 | 10-27-95 |
| | A55 | 5,770,910 | 06-23-98 | Horst | 310 | 214 | 12-30-93 |
| | A56 | 5,852,334 | 12-22-98 | Pengov | 310 | 168 | 10-19-95 |
| | A57 | 5,986,418 | 11-16-99 | Horst, et. al | 318 | 254 | 11-24-97 |
| | A58 | 6,028,385 | 02-22-2000 | Pengov | 310 | 166 | 10-26-98 |
| V | A59 | 6,051,903 | 04-18-2000 | Pengov | 310 | 168 | 13-98 |
| Ms | A60 | 6,072,260 | 06-06-2000 | Randall | 310 | 216 | 0519-99 |

| Examiner: | (= willerma | RHZ | DATE CONSIDERED: | 7/15/0 |
|-----------|-------------|-------|------------------|--------|
| | | 1 1 1 | • | .,, , |

Form PTO-1449 (modified Serial No. Atty. Docket No. 10831.0027.000000 09/678,041 Applicant: Gary E. Horst List of Patents and Publications Title: Reduced Noise Dynamoelectric Machine SUPPLEMENTAL INFORMATION DISCLOSURE **STATEMENT** Filing Date: Group: (Use several sheets if necessary) October 3, 2000 2834 Other Art **U.S. Patent Documents** Foreign Patent Documents See Page 1 See Page 4 See Page 4

Foreign Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Country | Class | Sub Class | Translation Yes/No |
|----------------|--------------|--------------------|----------|----------------|--------|--------------|-----------------------|
| MA | Bl | 0 557 811 A1 | 9/01/93 | Europe | H02P | 6/02 | N/A |
| 1 | B2 | 0 749 202 A1 | 12/18/96 | Europe | Н02Р | 7/05 | N/A |
| | В3 | 03-089897 A | 4/15/91 | Јарал | H02P | 8/00 | Abstract |
| | B4 | 2 167 253 A | 5/21/86 | United Kingdom | H02P | 6/00 | N/A |
| | B5 | 2 167 910 A | 6/4/86 | United Kingdom | H02K | 1/06 | N/A |
| | В6 | 4 036 565 C1 | 5/21/92 | Germany | H02P 8 | 8/00 | Abstract |
| | В7 | WO 93/05564 | 3/18/93 | WIPO | Н02Р | 6/02 | N/A |
| V | B8 | WO 94/28618 | 12/8/94 | WIPO | H02P | 6/02 | N. C. |
| PS | В9 | 07-298669 | 11/10/95 | Japan | H02 | 5/05 | Abbract |

Other Art (Including Author, Title, Date Pertinent Pages, 단물) 얼

| Exam. Init. | Ref. Des. | Citation 20 |
|----------------|--------------|--|
| W | CI | English Abstract of Japanese patent application no. 06-086769 published as 07-298669 November 10, 1995 |
| | C2 | English Abstract of Japanese Patent JP3089897 |
| | C3 | English Abstract of German Patent DE 4036565 |
| | C4 | C. Pollock and C. Y. Wu, "Acoustic Noise Cancellation Techniques for Switched Reluctance Drives," Record of the Industry Applications Conference (IAS), Vol 1, pp. 448-455, Orlando, Florida, October 8-12, 1995 |
| MA | C5 | C. Y. Wu and C. Pollock, "Analysis and Reduction of Vibration and Acoustic Noise in the Switched Reluctance Drive," 1993, Proceedings of the IAS '93, pp. 106-113 |

| Examiner: | Gullerma | Perez | DATE CONSIDERED: | 7/0 | 5/0) | 3 |
|-----------|----------|----------|------------------|-----|------|---|
| | 0 | 11 / (- | • | , , | , , | |

Form PTO-1449 (modified)

Atty. Docket No. 10831.0027.000000 Serial No.

09/678,041

List of Patents and Publications for Applicant's

SUPPLEMENTAL INFORMATION DISCLOSURE **STATEMENT**

(Use several sheets if necessary)

Applicant: Gary E. Horst

Title: Reduced Noise Dynamoelectric Machine

Filing Date:

Group:

October 3, 2000

2834

U.S. Patent Documents See Page 1

Foreign Patent Documents See Page 4

Other Art See Page 4

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation | | | | | |
|----------------|--------------|--|--|--|--|--|--|
| MA | C6 | C. Y. Wu and C. Pollock, "Analysis and Reduction of Vibration and Acoustic Noise in the Switched Reluctance Drive," <i>IEEE Transactions on Industry Applications</i> , Vol. 31, No. 1 pp. 91-98, January/February 1995 Charles Pollock and Barry W. Williams, "A Unipolar Converter for a Switched Reluctance Motor," <i>Conference Record of the 1988 IEEE Industry Applications Society Annual Meeting</i> , pp. 44-49, Pittsburg, Pennsylvania, October 2-7, 1988 D. E. Cameron et al., "The Origin and Reduction of Acoustic Noise in Doubly Salient Variable-Reluctance Motors," November/December 1992, IEEE Transactions on Industry Applications, Vol. 28 No. 6, pp. 1250-1255 F. Blaabjerg et al., "Investigation and Reduction of Acoustical Noise from Switched Reluctance Drives in Current and Voltage Control," September 5-71994, Proc. ICEM '94, pp. 589-594 | | | | | |
| | C7 | | | | | | |
| | C8 | | | | | | |
| | С9 | | | | | | |
| | C10 | Frede Blaabjerg and John K. Pedersen, "Digital Implemented Random Modulation Strategies for AC and Switched Reluctance Drives," Proceedings of the IECON'93, pp. 676-682, International Conference Industrial Conference on Industrial Electronics, Control and Instrumentation, Maui, Hawaii, Nov. 15-19, 1993. | | | | | |
| | CII | Mehdi Moallem et. al., "Effect of Rotor Profiles on the Torque of a Switched-Reluctance Motor", IEEE Transactions on Industry Applications, Vol. 28, No. 2, March/April 1992, ppgs. 364-369 | | | | | |
| | C12 | Richard S. Wallace and David G. Taylor, "A Balanced Commutator for Switched Reluctance Motors to Reduce Torque Ripple," IEEE Transactions on Power Electronics, vol. 7, No. 4, pp. 617-626, Oct. 1992. | | | | | |
| 7 | C13 | Richard S. Wallace and David G. Taylor, "Low-Torque-RippleSwitched Reluctance otors for Direct-Drive Robotics," <i>IEEE Transactions on Robotics and Automation</i> , Vol. 7, No. 3, pp. 733-742, December 1991 | | | | | |
| PI | C14 | Richard S. Wallace, Jr., "Design and Control of Switched Reluctance Motors to Reffice Torque Ripple," Georgia Institute of Technology, Nov. 1990. | | | | | |
| | | 2002 NTER | | | | | |

| Examiner: | Guillerma | Perez | DATE CONSIDERED: | 7/15/63 | 800 |
|-----------|-----------|-------|------------------|---------|-----|
| | | | | | |

Form PTO-1449 (modified) List of Patents and Publications for Application SUPPLEMENTAL INFORMATION DISCLOSURE **STATEMENT**

(Use several sheets if necessary)

Serial No. Atty. Docket No. 10831.0027.000000 09/678,041

Applicant: Gary E. Horst

Title: Reduced Noise Dynamoelectric Machine

Filing Date:

Group:

October 3, 2000

2834

U.S. Patent Documents See Page 1

Foreign Patent Documents See Page 4

Other Art See Page 4

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation |
|----------------|--------------|---|
| M | C15 | S. Chan et al., "Performance Enhancement of Single-Phase Switched-Reluctance Motor by DC Link Voltage Boosting," September 1993, IEEE Proceedings-B, Vol. 140, pp. 316-322 |
| 1 | C16 | Shi-Ping Hsu et al., "Modeling and Analysis of Switching DC-to-DC Converters in Constant- Frequency Current-ProgrammedMode," 1979, IEEE Power Electronics Specialists Conference, pp. 284-301 |
| MI | C17 | Stephenson and Blake, "The Characteristics, Design and Applications of Switched Reluctance Motors and Drives," PCIM Conference & Exhibition, June 21-24, 1993, Nuremberg, Germany |

| _ |
|-----------------------|
| = |
| _ |
| _ |
| _ |
| 2 |
| |
| ~ |
| • |
| _ |
| $\boldsymbol{\sigma}$ |
| - |
| |
| z |
| |
| |
| _ |
| 1.1 |
| 20 |
| |
| N |
| |
| 8 |
| |
| 0 |
| = |
| 0 |
| |

| Examiner: | Guiller | no Perez | DATE CONSIDERED: | 7/ | [5]0, | 3 |
|-----------|---------|----------|------------------|----|-------|---|
|-----------|---------|----------|------------------|----|-------|---|